

ABSTRACT OF THE DISCLOSURE

A comminuting apparatus is provided having a frame, a set of overlapping scissor rolls, a shear outtake manifold, and a pneumatic conveyor. The frame has an enclosure with an entrance for receiving waste material. The set of overlapping scissor rolls includes a feed scissor roll and a recirculation scissor roll, both the feed scissor roll and the recirculation scissor roll being carried for co-rotation within the enclosure and operative to comminute the waste material into subdivided pieces by drawing the received waste material beneath the feed scissor roll and up between the feed scissor roll and the recirculation scissor roll. The shear outtake manifold is beneath the scissor rolls and is configured to collect the subdivided pieces of waste material. The screen is interposed between the set of scissor rolls and the shear outtake manifold and is operative to permit undersized smaller pieces of a size less than a predetermined size to pass therethrough and to prevent oversized pieces of a size greater than a predetermined size from passing therethrough. The pneumatic conveyor comprises a source of air flow. A pneumatic duct communicates with an upstream end of the shear outtake manifold and is operative to deliver an airstream from the source of air flow into the shear outtake manifold. The airstream entrains the subdivided pieces and removes the subdivided pieces from the shear outtake manifold.